CLAIMS

1. A vacuum pumping arrangement for controlling pressure in a chamber, the arrangement comprising a molecular pumping mechanism and a backing pumping mechanism, said backing pumping mechanism being rotatable by a motor, said motor being arranged to rotate said molecular pumping mechanism simultaneously with said backing pumping mechanism, and means for controlling the rotational speeds of the backing pumping mechanism and the molecular pumping mechanism.

2. A vacuum pumping arrangement as claimed in claim 1, wherein the molecular pumping mechanism and the backing pumping mechanism are arranged to be driven by a common drive shaft which is arranged to be driven by said motor.

3. A vacuum pumping arrangement as claimed in claim 1 or 2, wherein said molecular pumping mechanism comprises molecular drag pumping means.

4. A vacuum pumping arrangement as claimed in claim 3, wherein said molecular drag pumping means comprises Holweck pumping means.

5. A vacuum pumping arrangement as claimed in claim 4, wherein a holweck cylinder of the Holweck pumping means is formed from carbon fibre reinforced material.

6. A vacuum pumping arrangement as claimed in any one of the preceding claims, said molecular pumping mechanism comprising turbomolecular pumping means.

7. A vacuum pumping arrangement as claimed in any one of the preceding claims, wherein the backing pumping mechanism is a regenerative pumping mechanism.

8. A vacuum pumping arrangement as claimed in any one of the preceding claims, wherein the control means comprises means for measuring the pressure in the chamber, and means for changing the rotational speeds of the mechanisms in dependence on the measured pressure.

9. A method of controlling pressure in a chamber connected to an inlet of a vacuum pumping arrangement comprising a backing pumping mechanism and a molecular pumping mechanism, and a motor for driving said backing pumping mechanism, the method comprising using said motor to control rotation of said molecular pumping mechanism thereby to control pressure in said chamber.

10. A method as claimed in claim 9, wherein the backing pumping mechanism and the molecular pumping mechanism are coupled to a common drive shaft and the method comprises using the motor to control rotation of the common drive shaft thereby to control pressure in said chamber.